**Schultz, James**

**To:** STIC-ILL
**Subject:** articles for 09/700,906

Hello,
Could you please obtain the following:

1) Maeshima Y; Kashihara N; Sugiyama H; Makino H; Ota Z,
JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY, (1996 Oct) 7 (10) 2219-29.

2) Cell proliferation-associated nuclear antigen defined by antibody Ki-67: a new kind of cell cycle-maintaining proteins.
Duchrow M; Schluter C; Key G; Kubbutat M H; Wohlenberg C; Flad H D; Gerdes J
ARCHIVUM IMMUNOLOGIAE ET THERAPIAE EXPERIMENTALIS, (1995) 43 (2) 117-21.

Thanks,
Doug Schultz

J. Douglas Schultz, Ph.D.
AU 1635 (Biotechnology)
Patent Examiner
United States Patent and Trademark Office
(703) 308-9355
(703) 305-3014 (fax)
Office: CM1 12E18
Mail: CM1 11E12

SEQ ID NO: 3

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FILE 'HOME' ENTERED AT 13:56:37 ON 16 DEC 2002

=> FIL REGISTRY
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

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Property values tagged with IC are from the ZIC/VINITI data file
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STRUCTURE FILE UPDATES:   15 DEC 2002  HIGHEST RN 476300-36-4
DICTIONARY FILE UPDATES:  15 DEC 2002  HIGHEST RN 476300-36-4

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s accaggcgtctcgtgggccacat/sqsn
L1            4 ACCAGGCGTCTCGTGGGCCACAT/SQSN

=> d l1 kwic sql 1-4

L1   ANSWER 1 OF 4  REGISTRY  COPYRIGHT 2002 ACS

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**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
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L1   ANSWER 2 OF 4  REGISTRY  COPYRIGHT 2002 ACS

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                                          = ========== ==========
     19301 attttctaaa cagtaagttg agtataatcc gtaggggaag gccaggtata
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HITS AT:   19280-19302
SQL  140466

L1   ANSWER 3 OF 4  REGISTRY  COPYRIGHT 2002 ACS

SEQ      1 accaggcgtc tcgtgggcca cat
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HITS AT:    1-23

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
SQL  23

L1   ANSWER 4 OF 4  REGISTRY  COPYRIGHT 2002 ACS

SEQ      1 accaggcgtc tcgtgggcca cat
           ========== ========== ===
HITS AT:    1-23

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
SQL  23


=> FIL MEDLINE BIOSIS EMBASE CA SCISEARCH
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                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    47.32      47.53

FILE 'MEDLINE' ENTERED AT 13:59:38 ON 16 DEC 2002

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=> s l1
'SQSN' IS NOT A VALID FIELD CODE
L2            1 L1

=> d l1 ibib abs
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ENTER DISPLAY FORMAT (IDE):max

L1   ANSWER 1 OF 4  REGISTRY  COPYRIGHT 2002 ACS
RN   390223-46-8  REGISTRY
CN   GenBank AX009578 (9CI)  (CA INDEX NAME)
FS   NUCLEIC ACID SEQUENCE
SQL  23
NA   4 a   8 c   7 g   4 t

SEQ      1 accaggcgtc tcgtgggcca cat
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HITS AT:    1-23

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
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SR   GenBank
LC   STN Files:   GENBANK


=> d his

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     FILE 'MEDLINE, BIOSIS, EMBASE, CA, SCISEARCH' ENTERED AT 13:59:38 ON 16
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L2            1 S L1

     FILE 'REGISTRY' ENTERED AT 14:00:35 ON 16 DEC 2002

     FILE 'MEDLINE, BIOSIS, EMBASE, CA, SCISEARCH' ENTERED AT 14:09:44 ON 16
     DEC 2002

=> d l1 all
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L1   ANSWER 1 OF 4  REGISTRY  COPYRIGHT 2002 ACS
RN   390223-46-8  REGISTRY
CN   GenBank AX009578 (9CI)  (CA INDEX NAME)
FS   NUCLEIC ACID SEQUENCE
SQL  23
NA   4 a   8 c   7 g   4 t

SEQ      1 accaggcgtc tcgtgggcca cat
           ========== ========== ===
HITS AT:   1-23

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**

MF   Unspecified
CI   MAN
SR   GenBank
LC   STN Files:   GENBANK


=> d l1 3-4 all
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y



L1   ANSWER 3 OF 4  REGISTRY  COPYRIGHT 2002 ACS
RN   251353-35-2  REGISTRY
CN   2: PN: DE19822954 PAGE: 3 unclaimed DNA (9CI)  (CA INDEX NAME)
FS   NUCLEIC ACID SEQUENCE
SQL  23
NA   4 a   8 c   7 g   4 t

PATENT ANNOTATIONS (PNTE):
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| Sequence Source | Patent Reference |
|---|---|
| Not Given | DE19822954 |
| | unclaimed |
| | PAGE 3 |

SEQ 1 accaggcgtc tcgtgggcca cat
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HITS AT: 1-23

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**

MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1

AN 132:9597 CA
TI Antisense oligonucleotides directed to cell cycle-associated protein Ki-67 mRNA for killing proliferating cells
IN Flad, Hans-Dieter; Gerdes, Johannes; Boehle, Andreas; Deinert, Irina
PA Forschungszentrum Borstel Zentrum fuer Medizin und Biowissenschaften, Germany
SO Ger. Offen., 36 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM C07H021-00
ICS C12N015-11; A61K048-00
CC 3-1 (Biochemical Genetics)
Section cross-reference(s): 1
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI DE 19822954 | A1 | 19991125 | DE 1998-19822954 | 19980522 |
| WO 9961607 | A2 | 19991202 | WO 1999-EP3451 | 19990520 |
| WO 9961607 | A3 | 20000323 | | |

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

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| AU 9943636 | A1 | 19991213 | AU 1999-43636 | 19990520 |
| EP 1080192 | A2 | 20010307 | EP 1999-926337 | 19990520 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRAI DE 1998-19822954 19980522
WO 1999-EP3451 19990520
AB Use of antisense oligonucleotides to Ki-67 mRNA to kill proliferating cells is disclosed. The cytotoxic effects on bladder carcinoma cells of a

23-base oligodeoxyribonucleotide complementary to Ki-67 mRNA encoding the N-terminus was demonstrated.

ST antitumor antisense oligonucleotide cell cycle protein Ki67 mRNA

IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Ki-67; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)

IT Allergy inhibitors
Anti-inflammatory agents
Antirheumatic agents
Antitumor agents
(antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)

IT Antisense oligonucleotides
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)

IT Antitumor agents
(bladder carcinoma; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)

IT Bladder
Bladder
(carcinoma, inhibitors; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)

IT Transplant rejection
(prevention of; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)

IT Skin, disease
(scar, prevention of formation of; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)

IT Autoimmune disease
(treatment of; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)

IT 152232-54-7
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(amino acid sequence; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)

IT 251301-36-7
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(antisense oligonucleotide; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)

IT 151581-02-1 251101-00-5
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(nucleotide sequence; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)

IT 251353-35-2, 2: PN: DE19822954 PAGE: 3 unclaimed DNA 251353-36-3, 4: PN: DE19822954 PAGE: 3 unclaimed DNA
RL: PRP (Properties)
(unclaimed nucleotide sequence; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)

L1 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2002 ACS
RN 251301-36-7 REGISTRY
CN DNA, d(P-thio)(A-C-C-A-G-G-C-G-T-C-T-C-G-T-G-G-G-C-C-A-C-A-T) (9CI) (CA INDEX NAME)
OTHER NAMES:

CN 3: PN: DE19822954 SEQID: 3 claimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 23
NA 4 a 8 c 7 g 4 t
NTE

| type | location | | | description |
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| modified link | c-3 | - | a-4 | P-thio |
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| modified link | g-6 | - | c-7 | P-thio |
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| modified link | c-19 | - | a-20 | P-thio |
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| modified link | a-22 | - | t-23 | P-thio |

PATENT ANNOTATIONS (PNTE):

| Sequence Source | Patent Reference |
|---|---|
| Not Given | DE19822954 claimed SEQID 3 |

SEQ 1 accaggcgtc tcgtgggcca cat
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HITS AT: 1-23

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**

MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

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PA Forschungszentrum Borstel Zentrum fuer Medizin und Biowissenschaften, Germany
SO Ger. Offen., 36 pp.
CODEN: GWXXBX
DT Patent
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IC ICM C07H021-00
ICS C12N015-11; A61K048-00
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| WO 9961607 | A3 | 20000323 | | |

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

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|---|---|---|---|---|
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| EP 1080192 | A2 | 20010307 | EP 1999-926337 | 19990520 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRAI DE 1998-19822954 19980522
WO 1999-EP3451 19990520

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Anti-inflammatory agents
Antirheumatic agents
Antitumor agents
(antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)
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(bladder carcinoma; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)
IT Bladder
Bladder
(carcinoma, inhibitors; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)
IT Transplant rejection
(prevention of; antisense oligonucleotides directed to cell

cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)
IT Skin, disease
(scar, prevention of formation of; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)
IT Autoimmune disease
(treatment of; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)
IT 152232-54-7
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(amino acid sequence; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)
IT 251301-36-7
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(antisense oligonucleotide; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)
IT 151581-02-1 251101-00-5
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(nucleotide sequence; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)
IT 251353-35-2, 2: PN: DE19822954 PAGE: 3 unclaimed DNA 251353-36-3, 4: PN: DE19822954 PAGE: 3 unclaimed DNA
RL: PRP (Properties)
(unclaimed nucleotide sequence; antisense oligonucleotides directed to cell cycle-assocd. protein Ki-67 mRNA for killing proliferating cells)

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| FULL ESTIMATED COST | 4.37 | 107.80 |

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